Burrowing Owl

Brian K. Jeffery

Give A Hoot!

Burrowing owls (*Athene cunicularia*) select pastures or other open grass areas for nesting and raising a family. These preferred areas are also excellent farmland and, as a result, most of the arable land in Canada's prairie provinces is privately owned. For this reason, success in conserving burrowing owls and their habitat relies, in part, on the interest of landowners and their informed actions.

Operation Burrowing Owl was initiated to encourage conservation of burrowing owl habitat, to provide landowners with information on factors that may have an adverse effect on these owls, and to monitor owl numbers. As our knowledge of burrowing owls and their requirements increases, we are able to develop actions people can take to ensure the owl remains a part of our prairie landscape. Once commonly encountered, the burrowing owl was listed as threatened in 1978 by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). As numbers continued to decline, it was uplisted to endangered in 1995. In 1999, the burrowing owl was among the first species to be listed as endangered under Saskatchewan's *Wildlife Act, 1997*. We are in danger of losing, within our lifetime, this symbol of a healthy prairie ecosystem.

Lorne Scott

OBO Forms Partnerships with Landowners

Lorne Scott

Operation Burrowing Owl (OBO) is a nationally recognized prairie stewardship program that provides an opportunity for landowners to take an active role in prairie conservation. As participants of OBO, farmers, ranchers, and other landowners voluntarily conserve burrowing owl nesting habitat. OBO was initiated in 1987 by Saskatchewan Environment and Resource Management following a study the previous year that found habitat to be rapidly vanishing in the core area (the Regina Plain), and owls to be present in unexpectedly low numbers. Nature Saskatchewan, a volunteer-driven conservation organization founded in 1949, has delivered OBO since 1990.

OBO participants take pride in their role in conservation, and receive an annual newsletter to inform them on owl habits, the population trend, research studies, and ways to encourage owl recovery. Participants have the option of receiving an OBO gate sign with their name on it.

GOAL: Conserve burrowing owl habitat through voluntary protection agreements with landowners.

Operation Burrowing Owl is, in essence, a voluntary "handshake" agreement with landowners to conserve burrowing owl habitat surrounding both active and historic nest sites. Landowners conserve habitat by agreeing not to cultivate the land. A landowner must have nesting owls in order to join OBO. Although some OBO sites have not been occupied by owls for many years, participants are encouraged to continue protecting habitat in order to maintain areas for dispersing young, and for a larger population if recovery efforts are successful. Currently, almost 500 OBO participants are conserving over 50,000 acres of burrowing owl habitat on private land, and approximately 100,000 acres on public land.

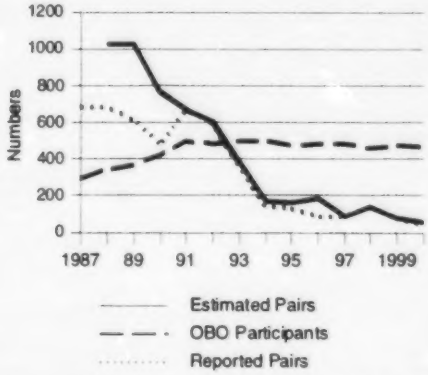
Protecting Owls Too! Operation Burrowing Owl Road Warning Signs

Ryan Fahlman

Burrowing owls nesting near roadsides are at risk of being killed as a result of collisions with vehicles. Owls are often seen along roads, possibly hunting for insects attracted to the warm surfaces or for small mammals in the ditches. Juveniles may be particularly vulnerable to being hit as they frequently hunt for food on roads, especially in July and August. Road warning signs, available to OBO participants, alert drivers to reduce their speed and exercise care. If you have owls nesting close to a road, call Nature Saskatchewan for a set of signs.

GOAL: Compile an annual population census of burrowing owls in Saskatchewan.

Each year, OBO participants play an important role in monitoring changes in the burrowing owl population by reporting the number of owls nesting on their land. This information alerted us to the alarming decline in recent years, and will help in monitoring a burrowing owl population recovery.



Burrowing Owl Population Trend in Saskatchewan from OBO Data. (Estimated pairs have been calculated by correcting for non-reporting OBO participants.)

OBO participants report the number of owl pairs on their land by returning a census card, or by calling the toll-free HOOT line: 1-800-667-HOOT (4668). In addition, the public, conservation officers, and biologists working in the field report burrowing owl sightings over the HOOT-line. This information is then entered into a database.

Oh Where, Oh Where Has My Data Gone?

Saskatchewan Conservation Data Centre

The Operation Burrowing Owl database is shared by Nature Saskatchewan and the Saskatchewan Conservation Data Centre (SKCDC). The SKCDC is a joint initiative between Nature Saskatchewan, the Government of Saskatchewan, and The Nature Conservancy (U.S.), and provides valuable assistance in data management and analysis.

A primary role of the SKCDC is to inventory, research, and document the province's biological diversity (biodiversity) in order to provide information on Saskatchewan's rare plants, animals, and natural communities. Using this information, the SKCDC strives to increase public awareness on the importance of conserving biodiversity both in remaining natural areas and in areas with agriculture and

industry. When it is beneficial to species and natural communities, information is provided to developers, researchers, resource consultants, universities, government agencies, and conservation organizations.

OBO, SKCDC and the Public

From time to time, the SKCDC receives a request for burrowing owl information from the general public. When this occurs, the caller is given a description of the burrowing owl's preferred habitat, but not a specific nesting location. Individuals and groups are directed to the Saskatchewan Burrowing Owl Interpretive Centre in Moose Jaw to view owls in their natural habitat, and to learn about burrowing owl research and conservation initiatives.

OBO, SKCDC and Industry

Frank Switzer

Commercial and residential developments, transportation projects, utility construction, landfills, petroleum exploration, mining, and flood control projects may require environmental impact assessments (EIAs). Companies may request information from the SKCDC on the occurrence and locations of burrowing owls on project sites to enable them to avoid disturbing the owls and their habitat. SKCDC reviews each request for rare plant or animal information, including burrowing owls, on a case by case basis to ensure effective conservation objectives are identified. Companies with a valid enquiry are provided with a list of known occurrences and status of rare plants and animals in the specified area, and whether occurrences are active or historic. However, this information does not replace the potential need for a site investigation by the company.

Different project activities may have varying impacts on nesting burrowing owls. A vehicle passing owls nesting near a highway may have no effect on the owls, while the same action could have a greater effect on owls not accustomed to vehicle traffic. If owls are near a project area, the company is asked to follow guidelines that have been developed to reduce the possibility of the owls abandoning the nest, and to increase the prospect of owls successfully raising young.

Project activities are classified as either passive or development. Examples of passive activities include walking past a nest and vehicle surveys. Examples of development activities include drilling, trenching, and seismic work. From April 15 to July 15 (the owl's nesting period), a 200-m buffer is recommended for low intensity (passive) activities. From April 15 to July 31 (the owl's nesting and fledging period), a 500-m buffer is recommended for high intensity (development) activities. These recommendations do not apply to inactive nest sites.

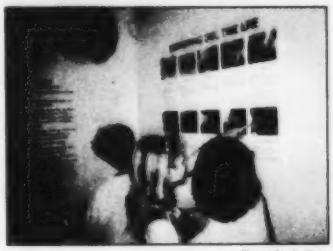
GOAL: To Increase Awareness about the Burrowing Owl & It's Ecosystem

Brian K. Jeffery

In 1997, the Saskatchewan Burrowing Owl Interpretative Centre (SBOIC) was established on the Moose Jaw Exhibition Grounds. Presently, SBOIC has nesting owls in the race track infield, 12 non-releasable owls, a Ferruginous hawk and an acre of newly planted native prairie. SBOIC provides a unique opportunity for the public to view this endangered species and learn about Burrowing Owl biology, conservation and recovery initiatives.

Our fun and interactive educational programs allow us to make an impression on the next generation of land users by creating an inspirational learning environment. The Burrowing Owl shares the environment with humans, thus, it is essential to raise awareness about the role that humans play in the loss of the Burrowing Owl as well as the role they can play in saving the species from extinction in Canada.

SBOIC is open year round (by appointment only in the fall and winter seasons). To make a group booking, or find out more information please contact us at (306) 692-8710, or sboic@sk.sympatico.ca.



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GOAL: Habitat protection through conservation easements.

Conservation easements provide an opportunity for landowners to protect natural, archeological or historical features on their land from inappropriate development. A conservation easement is a voluntary legal agreement between a landowner and a qualified conservation organization to place restrictions on how the land is to be used and cared for. The restrictions never go beyond what the landowner wishes to see placed on the land. The easement agreement is filed with the land's title; if the land is sold, the easement restrictions remain in effect for the term of the easement. Easements may exist in perpetuity or

for a specified time. In this way, a conservation easement, under Saskatchewan's *Conservation Easement Act* (1997), facilitates habitat conservation while leaving land ownership and management to the landowner.

Nature Saskatchewan (OBO) and Saskatchewan Environment and Resource Management are among a number of agencies that are qualified to hold conservation easements. The final agreement, identifying the restrictions that protect the property, is the result of what both landowner and conservation organization agree to. A landowner granting an easement can benefit from a tax savings that reflects the value of the easement (i.e., the difference between the land's value with the conservation easement and the highest land-use value without the easement). Nature Saskatchewan is working with the Nature Conservancy of Canada to negotiate conservation easement agreements with landowners in Saskatchewan.

If you are interested in more information on easements, please contact Nature Saskatchewan, The Nature Conservancy of Canada, or Saskatchewan Environment and Resource Management.

What Can You, the Landowner, Do?

- Join OBO to be informed and contribute to owl conservation and monitoring.
- Request road warning signs from OBO if owls are nesting near roads.
- Maintain a diversity of grassland conditions, including heavily grazed sites.
- Maintain riparian grassland and wetlands.
- Tolerate badgers, ground squirrels and other burrowing mammals on pasture land.
- Avoid or exercise caution when using pesticides.
- Leave ditches and road allowances uncultivated.
- Maintain areas of taller grass adjacent to pastures with burrowing owls (this provides foraging habitat).
- Seed pasture, roadsides and right-of-ways with native seed (this results in more diversity of prey).
- Avoid tree planting near pastures with burrowing owls.
- Co-ordinate timing of development activity with the absence of burrowing owls.

A Word of Thanks!

Operation Burrowing Owl is a successful stewardship program. Other organizations model their own stewardship programs after OBO. It is the participation of landowners that drives this success. Not only do they care for owls and other wildlife by conserving habitat, but many have volunteered information about owls on their land for more than 10 years. With ongoing commitment and cooperation, the conservation of the burrowing owl in Saskatchewan is an achievable goal.

Support of Operation Burrowing Owl is gratefully acknowledged:

Canada Trust Friends of the Environment Foundation
Canadian Council for Human Resources in the Environment Industry: Environmental Youth Corps Internship Program
Elsa Wild Animal Appeal of Canada
Enbridge Pipelines Environmental Initiatives Program
Environment Canada: EcoAction 2000
Environment Canada: Habitat Stewardship Program for Species at Risk
Government of Canada: Millennium Partnership Program (for Natural Legacy 2000)
Human Resources Development Canada: Summer Career Placements Program
Mountain Equipment Co-op Environment Fund
Nature Saskatchewan: Saskatchewan Lotteries
Saskatchewan Environment and Resource Management: Fish and Wildlife Development Fund
The Nature Conservancy of Canada
Wildlife Habitat Canada
World Wildlife Fund and the Canadian Wildlife Service of Environment Canada: Endangered Species Recovery Fund

For more information, contact:

Operation Burrowing Owl
c/o Nature Saskatchewan
Rm 206, 1860 Lorne Street
Regina, SK S4P 2L7
Tel: (306) 780-9273 Tel: 1-800-667-HOOT (4668) Fax: (306)780-9263
E-mail: nature.sask@unibase.com
Website: www.unibase.com/~naturesk

Saskatchewan Conservation Data Centre
3rd Floor, 3211 Albert Street
Regina, SK S4S 5W6
Tel: (306) 787-5021 Fax: (306) 787-1349

Saskatchewan Environment and Resource Management
Fish and Wildlife Branch
4th Floor, 3211 Albert Street
Regina, SK S4S 5W6
Tel: (306) 787-2314 Fax: (306) 787-9544

Saskatchewan Burrowing Owl Interpretive Centre
Box 1467
250 Thatcher Drive
Moose Jaw, SK S6H 4R3
Tel: (306)692-8710 Fax: (306)692-2762
E-mail: sboic@sk.sympatico.ca

The public is encouraged to report any burrowing owl sightings by calling toll-free 1-800-667-4668 (the HOOT-LINE).

Saskatchewan Environment and Resource Management